

# **LUMPED RAMAN AMPLIFIER FOR ADAPTIVE DISPERSION COMPENSATION**

## **Abstract of the Disclosure**

5           An adaptive dispersion compensation system that also achieves optical  
amplification by inducing Raman amplification effects in dispersion compensating fiber.  
This amplification/chromatic dispersion compensation architecture may be applied, e.g.,  
at the end of an all-optical link, or an intermediate points along the link. By varying the  
length of dispersion compensating fiber used and the pump power, one may  
10       accommodate a wide range of dispersion compensation requirements as determined in the  
field. This scheme also provides all of the advantages typically provided by the use of  
Raman amplification.